In the Claims (Version with Markings to Show Changes Made):

Please cancel claims 1-3, 11 and 13 without prejudice.

Please amend claims 4-10, 12 and 14 as follows:

1.   (Cancelled)

2.   (Cancelled)

3.   (Cancelled)

4.   (Amended)   ~~A computer-based system compatible with spatial tracking technology consistent with that of claim 3, the integrated system comprising capability to process, store, retrieve, interface, and/or present over various media formats spatial tracking measurement data and associated derived data attributes related to athletic physical performance for the purpose of enabling~~ A system of computer-based programs for providing automated algorithms to extend conventional ~~extensions to established~~ gaming and wagering applications (namely win, place, and show bets, widely recognized in the horse racing industry) using object location data such as generated with US 6,204,813, commonly owned, as inputs to mathematical formulations for ~~specifically including~~ conditional, derivative, and/or combinational bets such that:

(a)   Derivative wagering is defined to be the class of all wagers derived from any mathematical combination of other wagers, such as an outcome that is the algebraic sum or difference of two or more other outcomes (Horse A finishes ahead of Horse B by a specified interval of time or distance, regardless of overall finish order);

(b)   Conditional wagering is defined to be a class of wagers wherein a conventional bet is placed and pre-conditioned upon a particular future event, such as selecting a particular horse to win subject to the condition that it must lead another particular horse by a specified interval of time and/or distance at a specified point of the race prior to finish;

(c)   Combinatorial wagering is a wager that is placed contingent upon the pre-specified result of a separately placed conventional bet, such as selecting a particular horse to finish in third place only if a particular horse wins.

5.   (Amended)   The system of claim ~~3~~ 4 further comprising capability to communicate with, or provide an interface to, existing legacy information systems including tote systems, odds/payouts information systems, infield/in-venue scoreboards, simulcast video distribution to in-venue monitors/kiosks and to remote off-track-betting establishments (OTBs).

6.   (Amended)   The system of claim 3 4 further comprising capability to provide various presentations of results thereof, over various media formats including, but not limited to, printed hardcopy, computer-generated hypertext, interactive animations, and/or synchronized graphic overlay with video.

7.   (Amended)   The system of claim 3 4 further comprising the ability to generate trend analysis, using past and present performance quantification and derivative wagering models as determined by said system and method, to provide simulation results for handicapping purposes to plan and optimize future wagers.

8.   (Amended)   The system of claim 3 4 further comprising the ability to set a user alert or user preference, such that the user can be paged or called back over a wireless communications device, with the live or requested data results formatted and customized for presentation over said device.

9.   (Amended)   A method for automating the implementation and tracking of derivative and conditional based wagering by employing spatial tracking measurements as the basis of computer-assisted analysis and presentation of said assessment results for providing automated algorithms to extend conventional gaming and wagering applications (namely win, place, and show bets, widely recognized in the horse racing industry) using object location data such as generated with US 6,204,813, commonly owned, as inputs to mathematical formulations for conditional, derivative, and/or combinational bets such that.

    (a) Derivative wagering is defined to be the class of all wagers derived from any mathematical combination of other wagers, such as an outcome that is the algebraic sum or difference of two or more other outcomes (Horse A finishes ahead of Horse B by a specified interval of time or distance, regardless of overall finish order);

    (b) Conditional wagering is defined to be a class of wagers wherein a conventional bet is placed and pre-conditioned upon a particular future event, such as selecting a particular horse to win subject to the condition that it must lead another particular horse by a specified interval of time and/or distance at a specified point of the race prior to finish;

    (c) Combinatorial wagering is a wager that is placed contingent upon the pre-specified result of a separately placed conventional bet, such as selecting a particular horse to finish in third place only if a particular horse wins.

10.   (Amended)   The method of claim 9 further comprising a data storage subsystem, integrated locally and/or accessible remotely over a computer network or via the Internet, so as to facilitate an ability to present comparisons of past performance results as related to conditional, derivative, and combinational wagering.

11.   (Cancelled)

12.   (Amended)   The method of claim 9 further comprising capability to provide various presentations of results [thereof] of past results of conditional, derivative, and combinational wagering, over various media formats

including, but not limited to, printed hardcopy, computer-generated hypertext, interactive animations, and/or synchronized graphic overlay with video.

13.   (Cancelled)

14.   (Amended)   The method of claim 9 further comprising the ability to set a user alert or user preference, such that the user can be paged or called back over a wireless communications device, with the live or requested data relating to conditional, derivative, and combinational wagering results formatted and customized for presentation over said device.